

Method Of Defining Coefficients For Use
In Interpolating Pixel Values

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ABSTRACT OF THE DISCLOSURE

10 A method for generating coefficients for a set of
convolution kernels for use in interpolating pixel values in
an image sensor is described. The coefficients are computed
by applying a constraint matrix specifying one or more
constraints. The method includes generating ideal sensor
data representative of a test image in a first color plane,
generating sensor data of the test image, generating f data
15 matrices including pixel data from multiple neighborhoods of
pixels in the pixel array, and determining the coefficients
for f convolution kernels using the ideal sensor data, the f
data matrices and by applying one or more constraints. The
use of a constraint matrix greatly simplifies the
20 computation of the coefficients and can be applied in image
processing to generate a high quality full color image.